

Amendments to the Specification

Please replace the paragraph [0054] at page 20, line 23 to page 21, line 3 with the following amended paragraph: "As an example of address applications based upon the second application rule, address ranges of "10.0.0.0" to "10.255.255.255", "172.16.0.0" to "172.16.255.255", ~~and "192.168.0.0" to "192.168.255.255"~~ are used as the private address ranges. The use-prohibited address range is selected to be, for example, "192.168.0.0 ~~240.0.0.0~~" to "192.168.255.255 ~~240.255.255.255~~"."

Please replace the paragraph [0087] at page 39, line 1 to page 40, line 3 with the following amended paragraph: "The above-produced internal packet 51 is transferred via the relay apparatus 3-1 and 3-4 to the access control apparatus 2-4 in accordance with the IP packet rule within the network. When the access control apparatus 2-4 receives the internal packet 51 (Step S21 of FIG. 12), the access control apparatus 2-4 checks an internal destination address contained in the internal packet 51. In this case, the access control apparatus 2-4 retrieves such a record of the conversion table 20, which contains the internal destination address "e" (Step S22). When the record containing the internal address "e" is not registered in the item of external source address of the conversion table 20, the access control apparatus 2-4 discards the internal packet 51 (Step S23). In this case, since such a record containing the internal address "e" is registered as a third record, the access control apparatus 2-4 checks s value of a request identification contained in the above-described third record (Steps S24 and S27). In this case, since the value of the checked request identification corresponds to such a value "2" which implies the non-private address communication, further since there is an ~~no~~ item of the

source receiving permission (Step 27-3), the internal packet 51 is not decapsulated, but the internal packet 51 directly becomes an external packet 52. Then, the external packet 52 is transmitted to the external unit of the integrated information communication system (Step S26), and then, is reached via the user communication line 11-4 to the terminal 9-1 provided inside the LAN02. The terminal 9-1 owns the IP address "e".

Please replace the paragraph [0139] at page 58, lines 11-13 with the following amended paragraph: "Next, another embodiment as to both the simple-encapsulation method and the simple decapsulation method will now be explained with reference to FIG. 21 and FIG. 22."

Please replace the paragraph [0165] at page 72, lines 16-22 with the following amended paragraph: "In the sub-conversion table 2412-1, for example, a record of a first column thereof is determined in such a manner that when a packet destination ~~transmission~~ internal address is "7821", a packet reception priority symbol is "pr-7821". In other words, the packet reception priority symbol "pr-7821" is determined in an one-to-one correspondence with respect to the internal address "7821" which is applied to the logic terminal 2413."

Please replace the paragraph [0170] at page 74, line 14 to page 75, line 4 with the following amended paragraph: "While an internal destination address of the internal packet IF01 is equal to "7821", the internal packet IF01 is reached via a communication line employed in the integrated information communication system 2400 (Step S1000 of FIG. 26). Such a record containing the internal address "7821" received by the internal packet IF01, and both a source ~~destination~~ IP address "2500" and a destination ~~source~~ IP

address "2100" contained in the received internal packet IF01 corresponds to the record of the first column of the main conversion table 2412-1, so that the packet reception priority degree "pr-7821" of the record is selected. The access control apparatus 2401 removes a simple header of the internal packet IF01 so as to recover the external IP packet (namely, simple-decapsulation at Step S1010). In this example, the destination IP address of this recovered external IP packet is equal to "2100", and the destination port number thereof is equal to "30".

Please replace the paragraph [0173] at page 76, lines 10-22 with the following amended paragraph: "An external IP packet which is sent out from a terminal having the external IP address "2600" employed in the LAN 2409-3 is simple-encapsulated by the access control apparatus 2403 2404 so as to be converted into an internal IP packet IF02. While an internal destination address of the internal packet IF02 is equal to "7821", the internal packet IF02 is transferred via a communication line, and then, is reached to the access control apparatus 2401. A "protocol type" of an external IP packet EF02 which is recovered from the internal IP packet is equal to "TCP", and a "source port number" is equal to "30" in this example. The external IP packet EF02 is delivered via the communication line 2421 to such a terminal having the destination IP address "2110"."

Please replace the paragraph [0209] at page 91, line 13 to page 92, line 8 with the following amended paragraph: "As indicated in FIG. 27, an integrated information communication system (2450) contains access control apparatus 2451, 2452-1 to 2452-11 and the access control apparatus 2451 contains a conversion table 2454. Reference

numerals 2456-1 to 2456-5 each indicate a LAN. Each of these LANs is connected via a communication line to any one of the access control apparatus 2451 ~~employed~~ in the integrated information communication system 2450. Each of these LANs contains a plurality of IP terminals. Reference numerals 2457-1 to 2457-11 show IP terminals having IP packet transmission/reception functions. An external IP packet corresponds to either IPv4 or IPv6. An internal packet may be performed by employing an HDLC frame or an MPLS frame, and contains both a destination address and an information portion, as indicated in FIG. 20 of the previously embodiment. When an HDLC frame for an optical link line (WDM trunk line) is employed, a destination address is equal to such a destination address which is defined by the HDLC technical method. When the MPLS frame is employed, a destination address is equal to a label which is defined by the MPLS technical method."

Please replace the paragraph [0212] at page 92, lines 19-25 with the following amended paragraph: "Among contents of a first record of the ~~main~~ conversion table 2454-1, namely "7821, 2100, 2500, 7200, 1, pr-7200, 2", the 5-th symbol "1" indicates a request identifier. Similar to the embodiment-1 and the embodiment-2, the value "1" of the request identification shows the intra-corporation communication. However, in this embodiment-5, the value indicates a subject to be simple-encapsulated."